Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BERNHARD METZGER

Appeal No. 2003-1928
Application No. 09/511,833

ON BRIEF

Before WALTZ, LIEBERMAN and JEFFREY T. SMITH, ***Administrative Patent Judges***.

JEFFREY T. SMITH, ***Administrative Patent Judge.***

DECISION ON APPEAL

Applicant appeals the decision of the Primary Examiner finally rejecting claims 1 to 12, all of the pending claims in the application.[1] We have jurisdiction under 35 U.S.C. § 134.

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[1] In rendering our decision we have considered Appellant's position as presented in the Brief filed September 25, 2002.

BACKGROUND

Appellant's invention relates to a photopolymerizable recording element. The recording element comprises a support, a photopolymerizable layer, a layer sensitive to infrared radiation (IR) and opaque to actinic radiation and an adhesive wax layer disposed between the photopolymerizable layer and the layer sensitive to infrared radiation. According to Appellant, the adhesive layer renders the IR layer less fragile and results in a less damaged photopolymerizable layer. (Brief, p. 2). Claim 1, which is representative of the claimed invention, appears below:

> 1. A photopolymerizable recording element comprising a support, at least one photopolymerizable layer containing at least one polymeric binder, at least one ethylenically unsaturated, copolymerizable, organic compound, and at least one photoinitiator or photoinitiator system, and a layer sensitive to infrared radiation and opaque to actinic radiation, characterized in that an adhesive wax layer is present between the photopolymerizable layer and the infrared-sensitive layer.

CITED PRIOR ART

As evidence of unpatentability, the Examiner relies on the following references:

Shuman	4,592,946	Jun. 03, 1986
Chang	5,155,003	Oct. 13, 1992
Fan	5,262,275	Nov. 16, 1993

The Examiner rejected claims 1 to 12 as unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Fan and Chang. The Examiner also rejected claims 1 to 12 as unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Fan and Shuman. (Answer, pp. 3 to 6).

DISCUSSION

We have carefully reviewed the claims, specification and applied prior art, including all of the arguments advanced by both the Examiner and Appellant in support of their respective positions. This review leads us to conclude that the rejections of claims 1 to 12 are not well founded. We will limit our discussion to the independent claim 1.

Rather than reiterate the respective positions advanced by the Examiner and Appellant, we refer to the Examiner's Answer and to Appellant's Brief for a complete exposition thereof.

Fan is directed to a flexographic element having an infrared ablatable layer capable of being selectively removed by a laser beam. The flexographic element comprises a support, a photopolymerizable layer, at least one barrier layer and at least one infrared-sensitive layer. The infrared-sensitive layer is opaque to actinic radiation and is ablatable from the surface of the barrier layer upon exposure to infrared laser radiation. The barrier layer is soluble, swellable, dispersible or liftable in the developer solution for the photopolymerizable layer.

According to the Examiner, the invention of Fan fails to disclose a wax material that is suitable as a barrier layer. (Answer, p. 4).

According to the Examiner, "one or ordinary skill in the art would have been motivated by the teachings of Fan to use any material conventionally use[d] for release layers to make the barrier layer of Fan." (Answer, p. 4). The Examiner also stated that "[w]ax, wax-like and resinous materials are conventionally used to make release layers and are known variants in the art. This position is supported by the teachings of Chang . . . which teaches a thermal imaging laminar medium having a release layer comprising a wax, wax-like or resinous materials." (Answer, p. 4).

The Examiner also relied on Shuman to provide motivation for using wax-based materials in the barrier layer of Fan. (Answer, p. 6). Specifically the Examiner states "Shuman establishes that wax binders and resin binders are conventionally used together in release layers to increase the durability and abrasion resistance of transferred images". (Answer, p. 6).

We do not agree that the Examiner has shown that there is motivation to use a wax, wax-like or resinous materials as the barrier layer in Fan. Fan discloses that two types of barrier layers can be used. The first type is one which is insensitive to actinic radiation and is soluble, swellable, dispersible or liftable in developer solutions for the photopolymerizable layer both before and after exposure to actinic radiation. The second

type of barrier layer is one which is soluble, swellable or dispersible in the developer solvent prior to exposure to actinic radiation, but is not affected by the developer solvent after exposure to actinic radiation. Fan does not indicate that wax, wax-like or resinous materials are suitable for use in the barrier layer.

Neither Chang or Shuman suggest the advantages or suitability of using wax, wax-like or resinous materials in Fan's flexographic element. There is no indication that the thermal imaging release layer comprising wax, wax-like or resinous materials as described by Chang would have the properties required by Fan. Specifically, there is no indication that the materials of the thermal imaging release layer are soluble, swellable, dispersible or liftable in developer solutions for the photopolymerizable layer. Similarly, there is no indication that the thermal ink transfer laminate release layer comprising wax and resinous materials as described by Shuman would have the properties required by Fan. Here again there is no indication that the materials of the thermal ink transfer laminate release layer are soluble, swellable, dispersible or liftable in developer solutions for the photopolymerizable layer. The Examiner has not made this assertion nor has the Examiner directed us to evidence which would support this position.

We agree with Appellant, Brief page 5, that the Examiner's motivation for substituting the resinous binder of Fan with the wax or wax like material of Chang is based on a misunderstanding of Chang. Contrary to the Examiner's position, Chang does not teach

that wax or wax like materials are equivalent to hydroxyalkyl cellulose and polyvinyl alcohol and are interchangeable. However, Chang discloses that binders such as hydroxyalkyl cellulose and polyvinyl alcohol can be included in the release layer containg the wax or wax like materials. (See col. 11).

For the foregoing reasons, and those presented in the Brief, we determine that the Examiner's conclusion of obviousness is not supported by facts. "Where the legal conclusion [of obviousness] is not supported by facts it cannot stand." ***In re Warner,*** 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967). Accordingly, the Examiner's rejections of claims 1 to 12 under § 103 are reversed.

CONCLUSION

The rejections of claims 1 to 12, as unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Fan and Chang and the combination of Fan and Shuman are reversed.

REVERSED

THOMAS A. WALTZ ***Administrative Patent Judge***	)	
PAUL LIEBERMAN ***Administrative Patent Judge***	)	**BOARD OF PATENT APPEALS AND INTERFERENCES**
JEFFREY T. SMITH ***Administrative Patent Judge***	)	

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